

California Environmental Protection Agency

Quality Management: A Model for Local Agencies

May 1998



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California Environmental Protection Agency

A Cleaner, Safer Tomorrow for California's Environment

Quality Management: A Model for Local Agencies

May 1998



"The mission of the California Environmental Protection Agency (Cal/EPA) is to improve environmental quality in order to protect public health, the welfare of our citizens, and California's natural resources."

Peter M. Rooney, Secretary
B.B. Blevins, Undersecretary
Andrea Lewis, Assistant for Quality Programs

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INTRODUCTION

Introduction

For several years, the California Environmental Protection Agency (Cal/EPA) has been actively involved in quality improvement implementation pursuant to Senate Bill 1082 (Calderon, Chapter 418, Statutes of 1993). In addition to general requirements, the bill directed Cal/EPA to “develop a model quality management program that local agencies, charged with implementing air quality, water quality, toxics, solid waste and hazardous waste laws and regulations, may use at their discretion.”

We are pleased to offer this model quality implementation plan for our local agency partners. The content was developed with their input, via a customer survey sent to numerous associations, local agencies, and others.

Quality Management: An Overview

Quality management is a philosophy for organizational change and continuous improvement. Inherent in its concepts are three fundamentals:

- ◆ Focus on the customer, both internal & external.
- ◆ Long-term commitment and top management support.
- ◆ Continuous analysis of work processes and attention to the way work gets done.

You may ask: Why should we be interested in quality management? Implemented effectively, quality management will help your organization:

- ◆ Provide quality services and products to the public.
 - ◆ Meet or exceed customer expectations.
 - ◆ Accomplish goals more successfully.
 - ◆ Maximize and energize staff.
 - ◆ Enhance productivity.
 - ◆ Build stronger relationships, both internally & externally.
 - ◆ Improve the work environment.
 - ◆ Focus on doing the most critical work.
 - ◆ Continuously improve!
-

INTRODUCTION

Why Is Customer Focus Important?

If any organization in the public or private sector is going to thrive in today's environment, it must focus on meeting its customers' needs and expectations. Customers help us focus on "doing the right thing", and "doing it right". Without their feedback, in these times of rapid change, organizations can easily lose touch and become less effective.

Why is Customer Focus Important in a Regulatory Setting?

Since our customers may not have a choice of service providers, some of your staff may wonder why having a customer focus is important. Our organizations have been created with a mission related to protecting public health and the environment. By focusing on the customer, we can accomplish this goal more effectively. Many organizations are recognizing that enforcement is only one of many tools that can foster compliance. By working with our customers, we can identify additional tools to effectively enhance compliance.

As our customers, taxpayers and fee payers expect timely, accurate, and respectful service. Our stakeholders have a voice in the oversight of our agencies. The time honored check-and-balance strategy still works! They may not be able to express their displeasure with our services by going to a competitor, but they can (and do) voice their dissatisfaction through other means.

If their expectations are not met, stakeholders may raise their concerns to the appropriate elected officials. If the elected officials concur with the constituents' concerns, funding can be endangered or restrictions placed on functions or operations.

INTRODUCTION

What are the Advantages of Increasing Customer Focus?

Increasing focus on customers:

- ◆ Enables you to better meet your organization's mandate; better environmental results.
- ◆ Increases external customer satisfaction.
- ◆ Reduces the number and severity of complaints.
- ◆ Allows staff to produce quality work the first time because they better understand internal and external customer needs, thereby reducing rework (rewriting, revising, recovering from errors).
- ◆ Enhances internal coordination and cooperation.
- ◆ Increases staff knowledge of the organization and their role.
- ◆ Increases staff knowledge of their customers' needs, thereby increasing sense of connection.
- ◆ Builds processes with a customer focus from the beginning, instead of retrofitting based on complaints and errors.

A Few Final Words

This model plan sets the framework for implementing quality management principles and practices in your organization to achieve these, and other, objectives. Good luck!

CONSIDERATIONS AT START-UP

Building Infrastructure

Introducing quality management principles into your organization will be challenging at times. While some managers and staff will be supportive and understand the benefits of this approach, others will see it as a threat to their power and authority or just another "flavor of the month." As with any major cultural change, commitment and interest from top management must be the driving force or success will be marginal.

To effectively introduce and implement quality management practices and principles into an organization, a well thought out infrastructure to support the effort is important. Listed below are some of the elements you should consider.

Quality Council — Establish a steering committee to guide the quality effort on an ongoing basis. Membership should parallel the organization's top management or the management team can choose to incorporate quality council functions. Responsibilities of the quality council include chartering teams, allocating resources, and communicating expectations to the rest of the organization.

External Advisory Board — Consider recruiting an external advisory committee to guide you through the process. Membership can represent a broad range of interests, including state and local government, private industry, organized labor, and consultants. Quality leaders in each of these sectors can lend their experience and expertise to your quality council.

Resources — Allocate staff costs and operating expenses to implement the effort. Available resources may dictate your implementation approach. Consider costs for training, consultants, memberships, travel, books and videos, copying, and professional development and networking for your quality professional.

CONSIDERATIONS AT START-UP

We explore this area in more detail. See "Educational Needs" on Pages 27-30.

Coordinator/Point Person — Assign at least one person to coordinate the initial start-up activities and be a champion for the quality effort. Place the individual(s) near the top of the organization to ensure access to the top decision-makers, clear direction, and program credibility. This individual or individuals will provide internal consultation for the team leader and sponsor as well as facilitation services to teams.

More Key Factors

Quality Implementation Plan — Develop a quality implementation plan that outlines the approach you'll be taking:

- 1) to implement quality management theories/practices in the workplace; and
- 2) to manage all the associated tasks in order to achieve your goals and objectives is critical.

A plan also develops a common understanding of the path to incorporate quality management into the organization.

We explore this area in more detail. See "Key Elements in a Quality Plan" on Pages 10-12.

Customer Input — Improving and maintaining customer satisfaction is a basic tenet of any quality initiative. Be sure to factor customer input into the design of your quality management effort. By addressing processes or issues of greatest concern to your customers, you are more likely to gain early successes to launch your quality initiative.

We explore this area in more detail. See "Getting Focused on the Customer" on Pages 15-18.

Phased or Comprehensive Approach — Both approaches have their benefits and drawbacks. A phased approach allows you to target "low hanging fruit," focus your efforts on the critical few areas that will have the greatest impact, conserve scarce resources, and get your feet wet. A comprehensive approach gets everyone involved at once, creates an enthusiastic sense of urgency and purpose, and quickly integrates the quality initiative into the organization's day-to-day activities.

Project Identification and Approval — Determine how teams will be approved to begin work and how prospective team projects will be surfaced. Also ascertain how team recommendations, which cross-organizational lines, will be handled.

Chartering Teams — Another basic tenet of quality is the use of teams to improve processes and solve problems. A clearly defined chartering process ensures that limited resources are used to address the most critical problems and that clear direction is given to teams before they address those problems. Consider:

- ◆ How will teams be formed?
- ◆ Who can suggest an idea for a team?
- ◆ Who needs to approve a team before it is chartered?
- ◆ Who will sponsor the team? What are the sponsor's roles and responsibilities?
- ◆ How will team members and team leaders be chosen?
- ◆ What decisions can a team make on its own? How much authority will be given to teams?
- ◆ What are the standard deliverables for a team?
- ◆ What support will be provided to teams? Consider in-house facilitators, support staff, budget, training, etc.

CONSIDERATIONS AT START-UP

We explore this area in more detail. See Cal/EPA's booklet "Sponsor's Guide to Quality Teams".

Clarify Roles and Responsibilities — Since the way work is done will change as quality principles are introduced, roles and responsibilities will also evolve. Managers and staff need to understand their new, and likely different, roles and responsibilities.

Determine Success — To evaluate the success of your quality effort, you must clarify what it is you want to accomplish. Then, before implementation, create measures to establish a baseline in those areas. Continually collect data to measure your progress and make course adjustments as you proceed. Possible measures include: customer satisfaction ratings, cost savings, cycle times, and employee opinion surveys.

Organizational Assessment — You may want to consider using a comprehensive system of organizational assessment such as those used by the nationally recognized Malcolm Baldrige National Quality Award to build and assess your quality effort. The seven Baldrige criteria concentrate on the most critical areas for organizational improvement and include:

- ◆ **Leadership** — Examines senior leaders' personal leadership and involvement in creating and sustaining values, organizational direction, performance expectations, customer/stakeholder focus, learning, innovation and a leadership system that promotes performance excellence.
- ◆ **Strategic Planning** — Examines how the organization sets strategic directions, determines key action plans, and translates them into an effective performance management system.

CONSIDERATIONS AT START-UP

- ◆ Customer & Market Focus — Examines how the organization determines requirements and expectations of customers, enhances relationships with customers, and determines customer satisfaction.
- ◆ Information & Analysis — Examines the selection, management, and effectiveness of the use of data/information to support key organization processes and the performance management system.
- ◆ Human Resource Focus — Examines how the organization enables the work force to develop and utilize their full potential. The organization's efforts to build and maintain an environment conducive to performance excellence, full participation, and personal and organizational growth is also examined.
- ◆ Process Management — Examines how key processes are designed, effectively managed, and improved to achieve better performance.
- ◆ Business Results — The organization's performance and improvement in key business areas -- customer satisfaction, financial performance, human resource, supplier and partner performance, and operational performance are examined.

Glossary for this Section

- ◆ Sponsor — A high-level manager, with decision-making authority, who provides support and direction to the team. The sponsor is the link between the team and management.
- ◆ Charter — A written agreement between the team and team sponsor on items such as the mission, objectives, background, deliverables, and commitments of the team.
- ◆ Cycle time — A common timeliness measurement. Measures the elapsed time between the start and completion of a process or sub-process.

CONSIDERATIONS AT START-UP

- ◆ Facilitator — Consultant and coach to the team leader, team members, and sponsor on process, communication, and quality improvement.
- ◆ Team — A team is a core group of individuals committed to a common purpose and a set of performance standards and goals that are shared individually and collectively.

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KEY ELEMENTS IN A QUALITY PLAN

Introduction

A quality management plan is an effective tool to help an organization design and implement quality improvement initiatives and actually serves as a roadmap for organizational improvement. A quality plan has much the same purpose and format as a strategic plan. In fact, it is important to carefully tie the quality plan to the strategic direction of your organization. Ideally, each element in the quality plan will support and implement a key organizational goal or objective from your strategic plan. As the organization matures, a separate quality plan may be unnecessary as the quality initiative becomes fully integrated into your day-to-day activities.

Suggested Components

Introductory Letter — Introduce the document with a message of commitment from the agency/organization leader.

Commitment Statement — Include a commitment statement signed by the entire management team of the organization.

Vision and Mission — Explicitly delineate the vision and mission of your quality program. Explain how they relate to the overall vision, mission, and goals of the organization.

Key Goals — List your key goals for the next one to three years. Prioritize your list to provide focus and practicality.

Objectives — Break your goals down into specific and measurable targets for accomplishment. Be sure they are measurable, time-based statements of intent and emphasize the results of organizational actions at the end of a specific time.

Strategies — Formulate strategies to achieve your goals and objectives. Describe specific steps that will transform inputs into outputs, and eventually outcomes, with the best use of resources (budget, staff, equipment, etc.)

KEY ELEMENTS IN A QUALITY PLAN

Timetable — Set a tentative timetable for completing each element. Remain flexible, but reflect the prioritization of your goals.

Measures — Decide how you will evaluate progress. Set input, output, and outcome measures to track targeted improvements.

Roles and Responsibilities — Specify a central person to spearhead the quality initiative as well as key individuals that will provide support and/or guidance. Explain the responsibilities of each person/role.

Other Considerations

Before developing the quality plan, carefully consider who should provide input into the plan and whose support will be vital for its success. Don't overlook an important factor: your target audience. Assess who are the recipients of your plan and tailor the plan accordingly. Identify your organization's customers and solicit their input early in the process. Evaluate who within and outside the organization must provide active support and how you will position the effort to these individuals.

Determine who should author the document. Evaluate the pros and cons of using the quality professional as the lead person or a key leader in the organization.

Glossary for this Section

- ♦ **Mission** — The organization's unique reason for existence; the overarching goal for the organization usually contained within a formal statement of purpose.
- ♦ **Vision** — A compelling, conceptual, vivid image of the desired future of the organization.
- ♦ **Values** — The organization's guiding philosophy and beliefs. Values describe in concrete terms how the organization conducts itself in carrying out its mission.

KEY ELEMENTS IN A QUALITY PLAN

- ◆ Performance Measure — Operational indicators of the degree to which your products and services meet customer wants, needs, or expectations. Performance measures compare the actual results produced to the established customer requirements, internal and external.
- ◆ Input Measure — Measures of the resources that an agency uses to produce services, including human, financial, facility, or material resources.
- ◆ Output Measure — Measures of the quantity of a service or product provided to a service population; evidence of completed work.
- ◆ Outcome Measure — Identifying the result or impact of the output including events, occurrences, or conditions that indicate progress toward achievement of the mission and objectives of the program. This is not just what the program did, but the desired consequence of what the program accomplished.

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GETTING FOCUSED ON THE CUSTOMER

Introduction

Many organizations have focused their efforts on better understanding external customers in order to meet or exceed expectations. However, to meet external customer needs, we must focus on building and maintaining cooperative internal relationships as well. Building and maintaining effective internal relationship results in better communication, more efficient processes, and an increase in satisfied external customers.

Methods to Build Customer-Focused Organizations

In a government setting, we usually do not have marketing or customer research expertise, since building a customer base has not been our focus. There are many methods available to build a customer-focused organization. The chart shown on the following page lists methods you can use to elicit customer input, both internally and externally.

Select the method(s) based on your goal, your resources, your scope, and the importance of the issue. Some methods help you solicit feedback organization-wide, others are useful for more focused efforts, such as feedback on a specific issue, function, or process. The chart also identifies methods that improvement teams can use. The clearer your goals for soliciting feedback, the more likely you are to receive useful information. Finally, only solicit feedback if you will use it! If you ask for information and fail to use it or disregard it, your credibility will suffer.

GETTING FOCUSED ON THE CUSTOMER

METHODS	USES		
	ORGANIZATION WIDE	ISSUE SPECIFIC	TEAM BASED
Open forums	X		
Surveys (written, interview)	X	X	X
Public hearings or meetings		X	
Public comment period		X	X
Focus groups	X	X	X
Circulate draft documents for input (hard copy or internet)		X	X
Evaluate subjects of calls, complaints received	X	X	X
Study processes from customer perspective		X	X
Study causes of rework	X	X	X
Include stakeholders on process improvement or development teams		X	X
Convene advisory groups	X	X	
Develop performance measures	X	X	X
Ombudsperson positions	X		

GETTING FOCUSED ON THE CUSTOMER

Using Your Customer Feedback

After customer feedback is solicited, what are the next steps? No matter what method was used, the results must be analyzed and interpreted. Check for trends that identify specific issues and concerns, areas of satisfaction, suggested changes, or ideas for service improvements. When feasible, ask your customers to prioritize issues to be addressed, processes to be improved, or new services to be initiated. Issues that are very important to the customer, and where the level of satisfaction is low, provide the opportunity to make the most significant improvement.

Closing the Feedback Loop

It's not always enough to listen to the customer and initiate action. You may need to close the feedback loop by informing the customers of the results (summary) of the input, and the actions you will be or are taking. By communicating your response, they know you listened! You can communicate it via newsletters, stuffers in mailers, presentations at forums, Intranet/Internet, and other methods. In addition to letting them know you listened, check back with your customers to determine if the outcome of your actions was satisfactory.

Glossary for this Section

- ◆ Customer — Anyone who relies on you for a product or service.
- ◆ Internal Customer — Anyone within the organization who relies on you for a product or service.
- ◆ External Customer — Anyone outside the organization who relies on you for a product or service.
- ◆ Voluntary Customer — Anyone who chooses to use an agency's services, but does not have to.
- ◆ Entitled Customer — Anyone who has an automatic legal right to benefit from the program, if qualified.

GETTING FOCUSED ON THE CUSTOMER

- ◆ **Compelled Customer** — Any individual or organization that falls under the jurisdiction of government programs that are regulatory in nature (where punitive action can be taken if users do not comply).
 - ◆ **Supplier** — Anyone who provides something that others need to do their work.
 - ◆ **Stakeholder** — Any person, group, or organization that can place a claim on the organization's attention, resources, or outputs.
 - ◆ **Focus Group** — Typically, a group of customers/stakeholders (internal and external) brought together to provide verbal, issue-specific feedback to an organization.
-

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Introduction

Process management is a key ingredient in quality improvement. What does process management mean? It is the effective design, implementation, monitoring, and continuous improvement of key work processes. It requires customer input, both internal and external; communication; and measurement of inputs, outputs, and outcomes of the key processes.

Designing or continuously improving processes can be achieved through the use of quality improvement teams, natural work groups (i.e. the existing organizational structure), task forces, etc. Whatever approach you opt to choose, strongly consider providing staff members with training on quality improvement principles and tools; team 'dynamics' (interaction); effective meeting management techniques; and other pertinent skill-building training/education to better ensure the team's success.

Below is information detailing the quality improvement team approach, our recommended option for process improvement and process management.

Quality Improvement Teams

Why have quality teams? Quality teams are a useful approach for tackling many tasks that will benefit from the input of more than one person, either for perspective, expertise, or buy-in. Quality teams can be the option of choice when the process crosses functions within the organization. Types and uses of quality teams are described in following pages. Natural work groups can be effective at managing processes, which are within their span of control.

How does a quality team differ from a group? In many organizations, workgroups or task forces are convened with minimal planning or communication. Quality teams have the following specific characteristics:

- ◆ Team charter (defined earlier)
 - ◆ Team sponsor (defined earlier)
 - ◆ Team facilitator (defined earlier)
 - ◆ Improvement methodology — A systematic approach to achieving continuous improvement or product/project development, tailored to the mission of the team.
 - ◆ Focus on task and process — A balance of focusing on task (content) and process (action steps, team dynamics).
 - ◆ Team training — Training on skills to enhance team success (meeting management, quality improvement, team dynamics).
-

Getting Quality Improvement Teams Started

Suggested steps to starting Quality Teams in your organization:

1. Evaluate past team, work group, and task force experience in your organization. Identify what worked and what did not. Network with other organizations to learn what worked well for them, and what they would do differently.
2. Develop infrastructure to support quality teams, without creating a new process that will stifle creations of teams. Consider the lessons learned from your organization's past experiences. Tailor your infrastructure to meet your needs.
3. When determining how many teams to start, weigh such factors as: resources available to support teams, balancing improvement needs with ongoing work, which issues are most important to address at this time.

As with any change, there may be some skeptics and resistance. Some organizations carefully select their first teams to build successes, and thereby support.

4. Consider team training to equip team members with skills for their project.
5. Review how the team process is working, following the principles of continuous improvement.

To explore this area in more detail, see Cal/EPA's booklet "Sponsor's Guide to Quality Teams".

Types of Quality Improvement Teams

Process Improvement Teams — Teams that are comprised of members that stretch across process boundaries to work to improve the whole process.

Project teams — Teams with a specific and finite mission to develop something new or accomplish a large and complex task. The team members may be temporarily redirected to the project, either part or full time.

Process development teams — Teams with a mission to develop a new process or product, or to implement a new program.

Problem solving teams — Teams that are convened solely to resolve a specific problem, whether it is a problem related to a step in a process, or another type of problem.

Selection of Team Members and Leaders -- Options

TEAM MEMBERS can be selected based on a variety of attributes:

1. Professional attributes — Occupation (i.e. attorney, chemist, etc.), technical expertise, organizational representation, experience with the process or problem being addressed, role (function) in the process, or stakeholder.
2. Personal attributes — Communication skills, creativity, flexibility, team player, contributor, or interest in project.

3. Realistic influences — Proposed member's availability, support from his/her manager, proposed member interest level, known interpersonal conflicts between proposed members, desired balance of managers and staff on the team, desired representation from different functions or programs or organizations, etc. If a proposed member is resistant, should you include him/her? That is a decision that will be dictated by circumstances. For example, if the person is resistant, but he/she is the only one that has a critical expertise, or can represent a specific program's perspective, you may still need them on the team. Don't despair, after some discussion to respond to some of the concerns, he/she may become a proponent.

The TEAM LEADER should be open to trying the quality improvement process, be familiar with the issue or process, have strong communication skills (including listening), and some technical expertise relevant to the issue. It is not necessary that the team leader be the highest level person on the team. In fact, it may hinder full participation of the other members.

It takes more time to be a team leader than a member, due to the time needed to plan the meetings, and to coordinate with the team sponsor. As a result, another critical requirement for a team leader is that he/she will be able to devote the necessary time to planning and attending the meetings.

Some organizations have the team members select a team leader at the first meeting. Other organizations select the team leader in advance. In this case, the team leader, in coordination with the team sponsor, writes the first draft of the team charter, selects members, and plans the first meeting.

Process Management Cycle

There are many methodologies and tools to aid in process management. These tools can be used to identify problems, analyze data, monitor process performance, and provide a roadmap for continuous improvement. The process of continuous improvement is embodied in the repeated cycle of “plan — do — check (or study) — act” (P-D-C-A). No matter what process you choose to develop, manage, and/or improve, this cycle will serve as a guide. P-D-C-A can be applied in all aspects of business, from problem solving to complex strategy planning and policy development. (See a diagram of P-D-C-A and description on the following page.)

PLAN — Since the planning stage is critical to success, it is important to devote the time necessary to review data, identify and analyze the problems or issues, and devise the best corrective action.

DO — Ideally, the second step involves a test of the proposed action on a small scale before fully implementing the solution. A small-scale test enables you to refine your proposed action based on your results. Oftentimes, what we perceive as being the solution to a problem is not validated once data is collected.

CHECK (STUDY) — In this third step, the results of your action(s) is checked. Based on your results, you implement your solution, refine your proposal and then implement, or return to the ‘plan’ step to reassess the problem.

ACT — This step, as the name implies, is full implementation of the action/solution. Are you finished? NO! Effective process management demands ongoing monitoring to identify problems or opportunities for further improvement.

There are many reference materials available on quality tools and roadmaps at your local library or bookstore.

Measurement

To effectively manage work processes, monitoring the “vital signs” via performance measures is key. Measures quantify how well the work is accomplished in terms of outputs and outcomes, effectiveness, efficiency, productivity, and quality. If you have chartered a team and you expect certain deliverables, in the absence of measures, how will you know the expected results were achieved? The ‘Check’ (study) step requires data collection and analysis to assess change versus *improvement*. Remember these points about measurement:

- ◆ You can’t manage what you don’t measure.
- ◆ Outcomes are measurable; the best intentions are not.
- ◆ Measures tell you if you’re “on track” and the extent of non-conformance.
- ◆ Measures identify what and where to improve.
- ◆ Measures identify whether and to what degree your improvement efforts are working.
- ◆ Measures provide data for effective decision making.

We explore this area in more detail. See Cal/EPA's booklet "Guide to Performance Measurement for Quality Improvement Teams".

For More Information

Brassard, Michael and Ritter, Duane. The Memory Jogger II. Methuen, Maine: GOAL/QPC, 1994.

Council for Continuous Improvement (CCI). Identifying, Measuring & Improving Processes. 950 South Bascom Avenue, Suite 3112, San Jose, California 95128. (408) 441-7716; Fax: (408)437-8724. Email: TELLCCI@aol.com; Home Page: <http://www.cci.org>

Hronec, Steven M. & Arthur Andersen & Co. Vital Signs: Using Quality, Time and Cost Performance Measurements to Chart Your Company's Future. American Management Association (AMACOM), 1993.

Rummler, Geary A. and Brache, Alan P. Improving Performance: How to Manage the White Space on the Organization Chart. San Francisco: Jossey-Bass Publishers, 1995.

Scholtes, Peter R. The Team Handbook. Madison, Wisconsin: Joiner Associates, Inc. 1995.

EDUCATIONAL NEEDS

Introduction

It could be argued if quality management is plain common sense, then what's the need for training staff in its use and application? Realistically, quality management requires staff, at all levels, to have a greater understanding of its concepts and increased skill in their use. It has been said that quality management embodies both organizational change and personal change. Thus, it is necessary to provide educational opportunities to meet the demand for new learning.

First Steps

In general, quality management success is directly related to the ability of leadership to spearhead the effort, of staff to support its implementation and effectively work together in teams, and of all levels to understand continuous improvement methodologies and measurement. It is important, therefore, that an educational component be developed to support quality management implementation. The following outlines initial steps that can be taken to build organizational capability:

- ◆ Determine the existing skill level of staff, including the leadership, in the following areas: quality management basics, effective communication and interaction, meeting management techniques, conflict resolution, process measurement, quality tools and techniques, and organizational change. This is an initial list; as your quality implementation proceeds, additional needs will surface. You may want to develop an internal skill assessment to assess your training baseline.
- ◆ Research what other organizations, private and public, are providing to staff in terms of educational opportunities/training classes. This benchmarking effort will provide valuable information about what training options are effective and what training programs are being utilized.

EDUCATIONAL NEEDS

- ◆ Once it is determined what specific training programs need to be offered, other decisions need to be made:
 - 1) Funding considerations — Is there adequate funding to support the procurement of training materials? Depending upon the scope and breadth of training needed, costs can be substantial.
 - 2) Resource considerations — Do you have the internal capability to provide training courses? Is staff skilled enough to conduct training workshops? Will staff be more receptive to internal staff versus external consultants providing training? All of these issues need to be carefully considered and balanced with your organization's culture. Ultimately, resources will have to be devoted to training and education. Options include Quality Improvement Coordinators, training office personnel, trained facilitators, outsourcing/contracting for services, or a combination of each.
 - 3) Rollout considerations — Do you have the capacity to provide training to the majority of staff concurrently or via a gradual provision of training to target groups? You must determine if there is value to providing the majority of staff with fundamental quality concepts, or other educational needs, to develop a critical mass.
 - 4) Sequencing — What target audience has priority? Who needs to be trained first? Most experts will recommend that top leadership be given highest priority for training, as quality implementation is most successful with top leadership support and buy-in.
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EDUCATIONAL NEEDS

Training Options

Your training program can either be self-developed or purchased from vendors/consultants. There are pros and cons to each approach.

TRAINING OPTION	PROS...	CONS...
Self-Developed	<ul style="list-style-type: none">♦ Usually cost-effective, depending upon class size♦ Customized♦ More buy-in♦ Builds self-sufficiency	<ul style="list-style-type: none">♦ Time and resource intensive to develop♦ Requires internal staff expertise in design & delivery♦ Staff involvement
Off-the-Shelf	<ul style="list-style-type: none">♦ Already prepared, ready for delivery♦ Start-up time reduced♦ Updates to material by vendor	<ul style="list-style-type: none">♦ Can be costly♦ May need customization♦ Heavy learning curve to deliver
Consultant-Developed	<ul style="list-style-type: none">♦ Already prepared, ready for delivery♦ Start-up time reduced♦ Customized	<ul style="list-style-type: none">♦ Dependence on consultant resources♦ Requires partnership with staff to develop/deliver♦ Can be costly

Deciding whether or not to develop your own training materials is contingent upon your timeframe/urgency for rollout, your resource commitments, and funding. Also take into consideration your organization's track record with consultants, past training deliveries, and staff receptivity.

EDUCATIONAL NEEDS

Training Vendors

There are numerous organizations/companies that offer a litany of training programs. The following highlights a sample of these companies used in both the private and public sector. This listing is provided for information only and is not an endorsement by the California Environmental Protection Agency.

- ◆ Blanchard Training & Development, Inc. 125 State Place, Escondido, CA 92025; 1-800-821-5332. In California (619) 489-5005.
- ◆ Zenger-Miller, 1735 Technology Drive, 6th floor, San Jose, CA 95110-1313; (408) 452-1244.
- ◆ GOAL/QPC. 13 Branch Street, Methuen, MA 01844-1953; 1-800-643-4316 or (508) 685-3900.
- ◆ Franklin Covey Co. 2200 West Parkway Boulevard, Salt Lake City, UT 84119-2099; 1-800-625-1492.
- ◆ Joiner & Associates, P. O. Box 5445, Madison, WI 53705-0445; (608) 238-8134.
- ◆ Crisp Publications and Training, 1200 Hamilton Court, Menlo Park, CA 94025; (800) 442-7477.
- ◆ California State Training Center, 1515 S Street, Suite 105, North Building, Sacramento, CA 95814-7243; (916) 445-5121.
- ◆ Los Rios Community College District, Sacramento, CA and other local community colleges.
- ◆ California State University, Sacramento, CA and other local state universities.
- ◆ Extension Courses (through your local community college or state university).

QUALITY RESOURCES

Introduction

You will find that quality practitioners and organizations are more than willing to assist you with your quality implementation activities. It is a natural outgrowth of the quality philosophy that information be shared, advice be given, and even resources be shared to help organizations succeed with their quality efforts.

Key Resources

- ♦ The American Society for Quality (ASQ). 611 East Wisconsin Avenue, P.O. Box 3005, Milwaukee, Wisconsin 53201-3005; 1-800-248-1946.
- ♦ The Council for Continuous Improvement (CCI). 950 South Bascom Avenue, Suite 3112, San Jose, CA 95128. (408) 441-7716; Fax: (408) 437-8724.
- ♦ GOAL/QPC. 13 Branch Street, Methuen, MA 01844-1953; 1-800-643-4316 or (508) 685-3900.
- ♦ Association for Quality & Participation (AQP). 801-B West 8th Street, Cincinnati, Ohio 45203-1607. (513) 381-1959; Fax: (513) 381-0070. E-mail: aqp@aqp2.org
- ♦ California Council for Quality & Service (CCQS). 2300 Boswell Road, Suite 211, Chula Vista, CA 91914; (619) 656-4200; Fax: (619) 656-2389. E-mail: ccqs@swmall.com; Home Page: <http://www.swmall.com/ccqs>
- ♦ California Center for Quality, Education and Development (CalQED). P.O. Box 1929, Danville, CA 94526-6929; (510) 210-9766; Fax: (510) 944-3455. E-mail: calqed@dnai.com
- ♦ Local 'quality' networking organizations.
- ♦ Deming Workgroups.

QUALITY RESOURCES

- ♦ Local community colleges/universities which offer Total Quality Management and related courses.
 - ♦ Magazines: Quality Progress (through ASQ), Quality Digest, Fortune, BusinessWeek, etc.
 - ♦ Websites (see attached listing).
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QUALITY RESOURCES

QUALITY RELATED WORLD WIDE WEB SITES

There are more than 1000 quality related Web Sites worldwide. The following is a list of non-commercial sites that various organizations' members have found useful in their professional activities: (If you have any suggested additions for the list, please e-mail them to qcqapgh@quality.org)

<http://www.asqc-qmd.org> ASQC Quality Management Division
<http://www.asqc.org> ASQC Headquarters
<http://www.qualityprogress.asqc.org> Quality Progress Magazine
<http://www.asqc.org/rab/index.html> Registration Accreditation Board
<http://www.asqc.org/about/divtech/qad/qad.html> ASQC Quality Audit Division
<http://www.quality.nist.gov> National Quality Award Homepage
<http://www.ansi.org> American National Standards Institute
<http://www.nssn.org> National Standards System Network
<http://www.iso.ch> International Organization for Standardization
<http://www.library.ucsb.edu/subj/standard.html> Standards Resources on the Internet
<http://www.apqc.org> American Productivity and Quality Center
<http://www.nhmccd.edu/AQP/index.htm> Association for Quality and Participation
<http://www-caes.mit.edu/products/deming/home.html> The Deming Home Page
<http://www.deming.org> The W. Edwards Deming Institute
<http://www.wineasy.se/qmp> The Quality Management Principle Site
<http://akao.larc.nasa.gov/dfc/qtec.html> NASA Quality Pages
<http://iosun.lanl.gov:2001/qp/qp.html> Los Alamos National Laboratory
Quality & Planning Program Office
<http://www.acq.osd.mil/es/std/stdhome/html> Defense Standardization Program
<http://www.npr.gov> National Performance Review
<http://ts.nist.gov/ts/htdocs/210/216/giqlp.htm> Govt/Industry Quality Liaison Panel
<http://www.cphq-hqcb.org> Health Care Quality Certification Board
<http://www.nahq.org.org> National Association for Healthcare Quality
<http://www.sae.org> Society of Automotive Engineers
<http://www.asnt.org> American Society for Nondestructive Testing
<http://www.aiag.org> Automotive Industry Action Group

Many of the listed web sites have links to other quality-related sites that can provide you valuable information. If the information you need cannot be found on the above sites, try:

<http://www.quality.org/qc> Quality Resources Online
OR
<http://www.nicom.com/-qadude/qualtiylinks.html> World of Quality Index

LESSONS LEARNED - CAL/EPA'S EXPERIENCE

Research Pays

When Cal/EPA initiated its Quality Improvement Partnership, we conducted extensive research: reading books and articles, attending training workshops, and talking to public and private-sector organizations. This research paid dividends. We received many suggestions that helped us plan our approach, identify possible barriers, and minimize expenses. Listening to the experiences and advice of others, we also realized there is not one “right way” to initiate a quality management initiative. Remember, an organization's culture should be considered as you design your approach and implementation. Within Cal/EPA, there are six organizations, each with their unique strengths and needs, as well as some common needs. We learned to tailor some of our efforts to those unique needs.

Patience

Another lesson we struggled with was patience. Any organizational change takes time and continuous effort. The return on your investment of time and energy will vary: some teams or initiatives will be extremely successful while others falter. Take heart, even model organizations experience ups and downs. And both experiences teach critical lessons!

Solicit Support

Quality management concepts have been evolving even prior to World War II. As a result, many organizations will have staff that have some knowledge, interest, or experience in quality. Tapping the expertise, energy, and support of these individuals can give your implementation an initial boost, and help build credibility.

Publicize Results

To fuel interest, the organization will need to see tangible results. Select your first efforts carefully. The first teams should tackle an achievable and necessary task. Do not saddle your first team with a gnawing issue that no one has been able to resolve, or a “sure win” that no one cares about. Dedicate the necessary resources to these efforts. Then

LESSONS LEARNED - CAL/EPA'S EXPERIENCE

celebrate and publicize the results. Through word-of-mouth and communication efforts, success stories will help sway staff from being skeptical to being curious and/or supportive.

Be Realistic

When introducing quality management into your organization, many opportunities for improvement will surface. It is tempting to try to “fix” everything at once. Be realistic about what can be achieved based on the level of support, resources (staff, dollars, supplies, equipment) and knowledge base. Recognize that improvement efforts must be balanced with the need to continually produce your core work and address customer needs and expectations.